

WHAT IS CLAIMED IS:

1 1. An internet network based video replay system adapted for enabling a
2 customer to view a video program comprising:

3 a network for providing a plurality of access programs selectively available to
4 enable a customer to view a selected program;

5 wherein the network stores a plurality of video programs for a predetermined
6 period of time to permit customers to view selected programs upon demand.

7 2. The internet network based video replay system according to claim 1,
8 wherein said video programming is live programming of events that is stored for a
9 predetermined period of time to permit a user to time shift viewing of selective
10 programs upon demand.

11 3. The internet network based video replay system according to claim 1, and
12 further including a replay portal for storing a plurality of programs and enabling a
13 customer to selectively retrieve a selected program for viewing.

14 4. The internet network based video replay system according to claim 3,
15 wherein said replay portal stores an individual program for a predetermined period of
16 time for selective viewing by a customer

17 5. The internet network based video replay system according to claim 4,
18 wherein after a predetermined period of time the individual program is recorded over
19 to enable a customer to retrieve one of a revised selection of a plurality of programs.

1 6. The internet network based video replay system according to claim 3,
2 wherein a high capacity backbone is provided to permit the replay portal to receive
3 programs from live sources and from broadcasts for retransmission to customers.

1 7. The internet network based video replay system according to claim 3,
2 wherein a replay portal receives programs from other replay portals for retransmission
3 to customers.

1 8. The internet network based video replay system according to claim 1, and
2 further including a primary hub for distributing programs to a secondary hub and fiber
3 optical connections from the secondary hub to a fiber node for retransmission to
4 individual customer homes.

1 9. The internet network based video replay system according to claim 1,
2 wherein said network includes a data sink for receiving network programs and live
3 programs from a provider, a storage unit for receiving said network programs and live
4 programs from the data sink and a data source for providing downstream viewing of
5 selected programming.

1 10. The internet network based video replay system according to claim 9, and
2 further including a storage manager unit for managing the selection of a particular
3 program by a customer and for addition and removal of data from a store.

1 11. The internet network based video replay system according to claim 10,
2 wherein said storage manager is operative connected to a data sink for receiving data
3 from upstream and writing the data to the store for a particular customer while making
4 the data available for immediate delivery to a customer.

1 12. The internet network based video replay system according to claim 9, and
2 further including a media manager for managing the selection of a particular program

by a customer, said media manager including a backend frame format means for determining the encapsulation of media frames in real transport protocol.

13. The internet network based video replay system according to claim 1, wherein a customer is enabled to view, still pause, reverse and fast forward the viewing of the video program.

14. The internet network based video replay system according to claim 1, wherein the acquiring of the video program is by a unicast real time transport protocol or any other unicast protocol.

15. The internet network based video replay system according to claim 1, wherein the acquiring of the video program is by a multicast real time transport protocol or other multicast protocol.

16. The internet network based video replay system according to claim 1, wherein the acquiring of the video program is by inter portal communication.

17. An internet network based video replay system according to claim 16, wherein the transfer is by a unicast real time transport protocol or any other unicast protocol.

18. An internet network based video replay system according to claim 16, wherein the transfer is by a multicast real time transport protocol or any other multicast protocol.

19. An internet network based video replay system adapted for enabling a customer to view a video program comprising:

a network for providing a plurality of access programs selectively available to enable a customer to view a selected program; and

5 a replay portal for storing a plurality of programs for enabling a
6 customer to selectively retrieve a selected program for viewing;

7 wherein the replay portal stores a plurality of video programs for a
8 predetermined period of time to permit customers to view, still pause, reverse
9 and fast forward the viewing of selective programs upon demand.

1 20. The internet network based video replay system according to claim 19,
2 wherein said video programming is live programming of events that is stored for a
3 predetermined period of time to permit a user to time shift viewing of selective
4 programs upon demand.

1 21. The internet network based video replay system according to claim 19,
2 wherein said replay portal stores an individual program for at least one of a
3 predetermined period of time and an undetermined period of time for selective
4 viewing by a customer.

1 22. The internet network based video replay system according to claim 21,
2 wherein after a predetermined period of time the individual program is recorded over
3 to enable a customer to retrieve one of a revised selection of a plurality of programs.

1 23. The internet network based video replay system according to claim 19,
2 wherein a high capacity backbone is provided to permit the replay portal to receive
3 programs from live sources and from broadcasts for retransmission to customers.

1 24. The internet network based video replay system according to claim 19,
2 wherein a replay portal receives programs from other replay portals for retransmission
3 to customers.

1 25. The internet network based video replay system according to claim 19,
2 wherein said network includes a data sink for receiving network programs and live

3 programs from a provider, a storage unit for receiving said network programs and live
4 programs from the data sink and a data source for providing downstream viewing of
5 selected programming.

1 26. The internet network based video replay system according to claim 25, and
2 further including a storage manager unit for managing the selection of a particular
3 program by a customer and for addition and removal of data from a store.

1 27. The internet network based video replay system according to claim 26,
2 wherein said storage manager is operative connected to a data sink for receiving data
3 from upstream and writing the data to the store for a particular customer while making
4 the data available for immediate delivery to a customer.

1 28. The internet network based video replay system according to claim 25, and
2 further including a media manager for managing the selection of a particular program
3 by a customer, said media manager including a backend frame format means for
4 determining the encapsulation of media frames in a real time transport protocol.

1 29. The internet network based video replay system according to claim 19,
2 wherein the acquiring of the video program is by a unicast real time transport protocol
3 or by any other unicast protocol.

1 30. The internet network based video replay system according to claim 19,
2 wherein the acquiring of the video program is by a multicast real time transport
3 protocol or by any other multicast protocol.

1 31. The internet network based video replay system according to claim 19,
2 wherein the acquiring of the video program is by inter portal communication.

1 32. The internet network based video replay system according to claim 31,
2 wherein the transfer is by a unicast real time transport protocol or any other unicast
3 protocol.

1 33. The internet network based video replay system according to claim 31,
2 wherein the transfer is by a multicast real time transport protocol or any other
3 multicast protocol.

1 34. An internet network based video replay system adapted for enabling a
2 customer to view a video program comprising:

3 a network for providing a plurality of access programs selectively
4 available to enable a customer to view a selected program; and

5 a customer replay portal for storing a plurality of programs for enabling
6 a customer to selectively retrieve a selected program for viewing;

7 wherein the customer replay portal is maintained by said customer to
8 store a plurality of video programs for at least one of a predetermined period of
9 time and an undetermined period of time to permit the customer to view, still
10 pause, reverse and fast forward the viewing of selective programs upon
11 demand.

1 35. The internet network based video replay system according to claim 34,
2 wherein said video programming is live programming of events that is stored for a
3 predetermined period of time to permit a user to time shift viewing of selective
4 programs upon demand.

1 36. The internet network based video replay system according to claim 34,
2 wherein a high capacity backbone is provided to permit the customer replay portal to
3 receive programs directly from live sources and from broadcasts

1 37. The internet network based video replay system according to claim 34, and
2 further including a media manager for managing the selection of a particular program
3 by a customer, said media manager including a backend frame format means for
4 determining the encapsulation of media frames in a real time transport protocol.

1 38. The internet network based video replay system according to claim 34,
2 wherein the acquiring of the video program is by a unicast real time transport protocol
3 or any other unicast protocol.

1 39. The internet network based video replay system according to claim 34,
2 wherein the acquiring of the video program is by a multicast real time transport
3 protocol or any other multicast protocol.

1 40. The internet network based video replay system according to claim 34,
2 wherein the acquiring of the video program is by inter portal communication.

1 41. The internet network based video replay system according to claim 40,
2 wherein the acquiring of the video program is by transfer from a network based portal
3 operated by a service provider.

1 42. The internet network based video replay system according to claim 40,
2 wherein the acquiring of the video program is by transfer from a network based portal
3 operated by another customer.